BEATING THE HESSIAN FLY

Methods of Successful Michigan Farmers.

At this time, when the fight on the Hessian Fly is becoming so wide spread, and every implement of warfare is being used, any word or method of control is eagerly sought. To the "pestered" wheat growers nothing is more acceptable than news of the success of other practical farmers and because of this the experience of Mr. P. I. Simons of Calhoun County Mich., is worthy of note. It is not a one year's test, but observations from three crops that the conclusion is based upon.

As Mr. Simons tells it: "The wheat field was severely attacked by the Hessian fly, and the average yield that year was 3 to 5 bushels per acre. Right across the fence from my wheat field was another on the same kind of ground that had been prepared in practically the same way.

"The difference was that I used 200 pounds of a complete fertilizer per acre. The application was made with a fertilizer attachment to the grain drill at the time of sowing. At four different places across the field strips were untreated and the entire field was seeded to clover.

"Up to June 10th the fly had not attacked my fertilized wheat, but had attacked the unfertilized wheat in the same field to such an extent that the drill rows where no fertilizer was used appeared as wagon roads across the field. At this time the field across the fence from mine had practically been destroyed, yielding only 3 bushels pe acre. My wheat threshed out 21 bushels per acre. The fertilizer that year meant an increase of at least 15 bushels per acre to me.

"Now, when it came to the seeding where no fertilizer was applied I failed to get a clover stand, while on the fertilized portion of the field I had the best clover in the neighborhood."

It should not be taken that fertilizer will kill the fly. It isn't an insecticide, but it fulfills its mission when the increased health and vigor of the plants results, and thus the fly turns to the weaker, sicklier plants to carry on the destruction. Sowing late will help avoid the fall brood, but no recourse other than having good strong healthy plants can be turned to so that the spring brood will not have the chance of profit-taking.

STAMP OUT THE FLY

"Three things are necessary in waging a successful warfare against the Hessian Fly, viz: thorough preparation of the soil, so as to form the best possible conditions for germination; heavy fertilization, if the soil is not already in good condition, so as to insure a quick and rapid growth, and late sowing so as to compel the flies to go elsewhere to deposit their eggs."

This extract from Bulletin 194 of the Indiana Experiment Station contains in a nut-shell the main conditions to be handled in the control of the pest. The Illinois Circular 146 also makes a good point when it declares: "A vigorous wheat plant is much better able to react against an attack of the fly, especially by stooling freely or throwing out an abundance of new shoots from the root. Whatever tends consequently, to give vigor to the plant reduces proportionally the percentage of loss."

This leads to the conclusion that a fertilizer containing at least 2 per cent ammonia and at least 10 per cent available phosphoric acid may be the salvation of the crop, and the experience of many users bear this out. With such crop insurance so cheap compared with results obtained, the enhanced chances for a successful clover catch always greater by its use, fertilizer will play a very important part in this fight on the Hessian Fly.

FEED-UP YOUR FIELDS INCREASE YOUR YIELDS

There is a farmer whom I know
who shows that he is wise,
He knows that larger yields of wheat
come when you fertilize,
With crop reports much lower than
last year and prices high,
The farmer easily can see that plant
food is his best buy,
Some nitrogen will help the growth,
phosphoric acid, too,
A little potash strengthens straw and
plumps the kernels too.
Let's help the plants make good stalk
growth and fill the kernels plump,
By feeding them with plant food (Sir)
—Then watch the profits jump!
The profits come with larger yields,
the average crops don't pay
So why not get your share of gain—
the fertilizer way?
With wheat you have a high-priced
crop and extra bushels count,
Fertilize your fields, bring up your
yields and watch your profits mount.
And when you see just how it pays
this year to fertilize your wheat,
Next year you'll feed your other crops
and all your records beat.
For farming is a game in which the
Golden Rule applies,
You feed your crops and they feed
you, so, therefore fertilize.
—Melvin Ryder

ART IN BOOKBINDING.

How Miss Lahey Won Mercier, the Master, For Her Tutor.

A woman who spent ten years and all the money she had in the world to become a skilled bookbinder is Marguerite Duprez Lahey. After studying with the most skilled tooler in Paris, says the American Magazine, Miss Lahey went to the world's greatest craftsman, M. Mercier.

M. Mercier was a man of large wealth and broad culture. He tooled for the love of it in his beautiful Paris home. His only pupil was his only son. No one in the Latin quarter had dared to penetrate M. Mercier's atelier. Undaunted, this American girl, armed with the "Life of Fragonard, by Pierre de Nolac," the toil of years and which had earned M. Domont's praise, went to M. Mercier's home.

The master was at his country seat.

"Is this your work?" cried his son, when Miss Lahey had disclosed the volume. "Leave it with me. I will show it to father. It will please him to see such strong work."

"And now what do you want of me?" asked the master, when tremulously she called later for the book and Mercier had sent his praise.

"To work with you."

"Good! I take you!"

Three times a week for two summers she worked under Mercier's supervision, the master tactfully refusing the pupil's proffered money.

"Perfect!" he said, when she had finished Prosper Merimee's "Chronicle of Charles IX."

Before this triumph her gold tooling on a volume of Frederic Masson's "Napoleon and Women" procured for her the work of the late J. P. Morgan's library. This was in 1908—the turning point of her unique career. Hers is the distinction of having designed, tooled and bound the cover of Mr. Morgan's personal copy of the catalogue of his world famous Chinese porcelain collection.

BREAK YOUR MATCH IN TWO.

A Suggestion That Became a Rule In Forest Fire Prevention.

One day late in June a man in a room on the seventh floor of an old fashioned brick building in Washington, holding a sheaf of telegrams in his left hand, was busy with his right taking red headed pins out of his mouth and sticking them into little irregular blocks of green ink scattered over a large white wall map of the United States.

"The big problem," he said, taking a fresh pin out of his mouth and turning sidewise to his assistant, "is to get at the fellow who knows what conservation is but forgets to apply it when he lights up a cigar in the woods."

The assistant sat at a flat topped oak desk in the middle of the room, struggling through a mass of reports from field men in the endeavor to find suggestions for a set of fire prevention "rules."

"Well, what do you think of this?" he said, holding up a report from the Pacific northwest: "'Break your match in two before you throw it away.'"

The other man stuck the last red pin into the map, reached for his pipe and lighted it.

"Let's see," he said. He snapped the burning match in his fingers. As the pieces dropped to the floor he uttered a sharp exclamation and tenderly licked the index finger of his left hand.

The assistant laughed. "That's the idea!" he said. "You've got to blow it out before you break it or get burned."

So this suggestion became No. 1 of a set of ten rules which the forest service sent to 6,000 newspapers at the beginning of the summer's fire season in the national forests.—Outlook.

Sandwich's Wonderful Drum.

The eccentric Lord Sandwich had, according to his biographer, a strange passion for the thunder of big drums, for the gratification of which passion he had caused the entire side of one large music room in his mansion at Hinchinbrook to be covered with parchment, so that when it was struck with a massive stick it gave out a roar sufficient to terrorize any sensitive soul. Many who heard this drum once struck positively declined ever to enter the apartment again lest they should be given a second performance.—St. Louis Republic.

Our Biggest Industry.

Measured by the number of persons employed, what is the country's biggest manufacturing industry? Lumbering, with its 48,000 sawmills, its $1,000,000,000 investment in these plants and its employment of 605,000 men to operate them. This does not include, says the Nation's Business, the standing timber, which brings up the total investment to $2,500,000,000.—Wall Street Journal.

Good Start.

"I'm going to start a comedy company on the road in a couple of weeks," said the theatrical manager.

"What play?" asked the critic.

"Oh, I haven't that written yet, but I heard a good joke today that we can use in it."—Exchange.

Beat Him.

"My ancestors came over in the Mayflower," announced the man who prides himself on his blue blood.

"Huh!" snorted the man of red corpuscles. "Mine sailed in the ark!"—Dallas News.

Not Acquired.

N. Read—How you stutter! Did you ever go to a stammering school? J. Perry—N-n-no, sir. I d-d-do this n-naturally.—Brooklyn Life.

To see another's heartache is to forget one's own.—Abraham Lincoln.

WARTIME NURSES

The Great Battle of Mercy Won by Florence Nightingale.

WORK OF THE GREAT PIONEER.

She Changed the Military Hospital From a Shambles Into a Life Saving Station and Became the Mother of Modern Nursing Methods.

Florence Nightingale, whose death occurred in 1911 at the advanced age of ninety, was a revolutionist in the most splendid sense of that term. She it was who revolutionized nursing to that extent that she may be considered as the mother of that profession.

Previous to her entrance into the field the sick were the victims of callous ignorance and grasping indifference, but Florence Nightingale introduced the trained, skilled and gentle hospital nurse, district nurse and military nurse of today.

Certainly to few women—and to few men—has it been given to serve their fellows so splendidly and so effectively. Florence Nightingale found chaos in military hospitals; she created order and all that order implies.

After the battle of Alma, in the Crimean war, the military hospital at Scutari was like a dirty shambles. Wounded men died in hundreds in the midst of squalor and vermin. Crowds of poisonous flies buzzed ceaselessly above the sick; medical supplies were inadequate; proper food could not be had; there were no arrangements for washing or sanitation.

The plight of the wounded soldiers, herded together in this hotbed of pestilence, was worse than if they had been left upon the battlefield. "Are there no devoted women among you," wrote Russell, the famous war correspondent of the London Times, "able and willing to go forth and administer to the sick and suffering soldiers in the east in the hospitals at Scutari? Are none of the daughters of England at this hour of need ready for such a work of mercy?"

This appeal was answered almost instantly. Sidney Herbert was then at the head of the war office, and when the authorities began to be inundated by letters from women of all classes anxious to respond to the call Mr. Herbert's thoughts at once turned to the lady who was in his opinion the one woman capable of organizing and taking out to the Crimea a staff of nurses. The woman was Florence Nightingale.

Miss Nightingale was thirty-four at the time, and from her childhood she had devoted herself to the study of hospital nursing and hospital management. In 1849 she had enrolled herself as a volunteer nurse at the first training school for sick nurses established in modern times—the Deaconess institution at Kaiserworth, on the Rhine. When the war broke out there was no woman in all England better fitted than Florence Nightingale to give to England's soldiers comfort and relief.

Mr. Herbert wrote to Miss Nightingale and asked her if she would go out and supervise the whole thing. His letter crossed one from her, for on the same day Florence Nightingale had written to the war office offering her services in the hospital at Scutari. The offer showed splendid courage.

Within a week of making her resolve, Miss Nightingale had her first contingent of nurses in marching order. She had selected thirty-eight nurses to accompany her, and they arrived at Scutari on the day before the battle of Inkerman. And without a moment's loss of time that lady in chief and her staff set to work to cleanse the Augean stable which they found waiting for them at the great barrack hospital.

In a short time the place was entirely renovated. Everything was scrubbed, old clothes were burned, a kitchen and laundry were established, and the place became a comfortable, well organized hospital. Florence Nightingale superintended everything. She worked as hard at the routine and organizing as at the nursing itself. At all hours of the day and night she would walk silently, lamp in hand, through the wards, giving a word of comfort here or instruction there. She saved the lives literally of hundreds.

Wounded men, so horribly mangled that doctors gave them no hope, and other nurses could not bring themselves to touch them, were saved from death by the tireless care of this one wonderful woman. The men worshiped the very shadow of this "lady with the lamp."

The supreme womanliness of the work of Miss Nightingale made her the idol of the English people. Three monarchs paid their tribute to her. Remembered by royalty she was not forgotten by the people. On her return, shattered in health, from Scutari, £250,000 was presented to her by a grateful nation. She used it all for the founding of the Nightingale Training Home For Nurses at St. Thomas' hospital, England, which is practically the parent of modern training homes throughout the world, just as Florence Nightingale was the mother of all present day nurses. — Cleveland Plain Dealer.

Spiritual Victory.

If after victory on the field of battle we fail to win spiritual victory and to place ideals where they truly should be the heroism of our soldiers will have done no more than postpone our own catastrophe for a few years.—M. Paul Sabatier.

Duty makes us do things well, but love makes us do them beautifully.—Phillips Brooks.

MYSTERY OF STEEL.

Our Modern Civilization Is Based on a Freak of Nature.

If it were not for one tiny, erratic break in nature's orderly progression we should never have had the machinery that has brought about modern civilization. For we should not have had steel. It is true we should have had iron, but pure iron is almost useless. It is only when a small quantity of carbon is added to it that it becomes hard enough to take a cutting edge. Then it is called steel.

Why steel hardens is an unsolved problem. The Scientific American reproduces some extracts from an address before the British Institute of Mechanical Engineers, delivered by Professor Arnold, who has for many years been investigating the chemical and mechanical relations between iron, carbon and other metals, and Sir Robert Hadfield's experiments that called attention to this "break" in the order of nature which alone makes steel possible.

Nickel and cobalt are so closely related to iron in their properties and in their position in the periodic classification—atomic weights, specific gravity, fusing point and valence being almost the same—that it might be expected they would behave identically when united with carbon. Not so, however. Sir Robert Hadfield found that when the "steel" made of nickel and cobalt was heated or hammered the carbon came out of the composition and was precipitated as graphite. If iron behaved this way tool steel would turn to cast iron as soon as heated. And it is on the fact that it does not—"a seemingly quite erratic departure on nature's part from her orderly plan"—that modern manufacture is founded.

LOFTY ACOMA.

Strange Indian Village Perched High Up In the Air.

Perched on the top of a great rock in the neighborhood of 300 feet high stands Acoma, in New Mexico, in some respects the strangest village in this country. Acoma is an Indian settlement of some 600 people and means "the people of the rock." Though the founding of the village is lost in the mist of antiquity, it is supposed the Acoma Indians chose this site as a measure of safety against the warlike Apaches and Navajos of their day. Their selection was made with admirable judgment, for the walls of the rock are almost perpendicular.

The earliest Spanish explorers found the tribe settled securely in their natural fortalice. Acoma has remained delightfully untouched by the influences of Spanish and American civilization. These Indians are quite well to do in sheep and cattle, which are pastured on the grazing lands of the valley, where summer villages are located and where the minimum of effort is required to care for the flocks and herds. Although less than twenty miles from a railroad, the village is comparatively unknown.

The natives do not care for curious visitors. They do not wish to be stared at and photographed. Nevertheless, the irrepressible tourist with his camera occasionally scales the steeps that baffled the Navajo. Nowadays it is no longer practicable to suppress him with a tomahawk, so the Acoma are philosophically making the best of a bad job by collecting $2 a day for a camera license. The gray adobe village peers from its eyrie over miles of gray plain dancing in the glare of a burning sun, broken only by the sheer outlines of buttes and mesas.—Argonaut.

The Cherokee Tribute Stone.

There are, of course, stairs running up the inside of the Washington monument, but few people walk up the stairs. Of course there are stones set in the wall by different states that are well worth the climb, but at sunset time the majority of folk think that it is better to ride. There is so much to see in our capital and feet are only—feet. As the elevator crawls up one sees the New York stone, the Ohio stone, the Kansas stone and many others. One sees a blurred stone labeled "The Cherokee Nation." Somehow that stone depresses a few people, for the white man has done little for his Indian brother in return for his land, his game, his dying race—his memorial stone.—Margaret E. Sangster, Jr., in Christian Herald.

Races of Mankind.

Authorities differ greatly in the classification of the races of mankind. Cuvier makes three races; Pritchard, seven; Agassiz, eight, and Pickering, eleven. But the classification most commonly accepted is that into five races, as made by Blumenbach, as follows: The Caucasion, European or white race; the Mongolian, Asiatic or yellow race; the Ethiopian, African or black race; the American Indian or red race; the Malay or brown race.

The "Earl Strad."

The most valuable remaining product of Stradivarius, the famous seventeenth century violin maker, is part of the Havemeyer collection of New York and is known as the "Earl Strad," because the master dedicated it to the earl of Northumberland in return for financial favors.

Raving.

"John, the cook has been drinking again."

"Is she very drunk?"

"Oh, very. She says she'll never leave us."—Washington Star.

Happiness has a way of hovering near those whose first wish is to make others happy.